

CHAPTER C3

As close as it gets: Developing professional identity through the potential of scenario-based learning

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Abstract

Scenario-based learning (SBL) predicated on situated learning theory and the valuing of contextual knowledge, may provide one stratagem for getting students, as would-be professionals, nearer to the realities of their chosen profession via the construction and deconstruction of scenarios. Within SBL processes, students have opportunities to engage with realistic sets of circumstances, experience true-to-life tasks, accept authentic challenges and assume work-oriented roles - all mediated through the language and communication styles found in real-life settings.

This chapter focuses on the potential of scenario-based learning to supplement/enrich work placements, internships and field work in the professions - so contributing to shaping and sustaining of professional identity and enhancing employability skills. A survey of the literature suggests four main scenario approaches are used by tertiary educators to foster professional identity: each approach is designed to supplement rather than substitute lived work experience. Errington (2003) has labelled these approaches: skills-based; problem-based; issues-based; and, speculative-based scenarios respectively. Each approach may be used singularly or in combination to facilitate/reveal understandings of workplace identity at specific stages of the would-be professional's journey.

The chapter is in two parts: The first locates attributes of scenario-based learning that lend themselves to the (de)construction of students' professional identity. The second part discusses specific scenario approaches that may be employed singularly, or in combination, to target particular aspects of professionalism including identity. The chapter concludes by noting the importance of teacher knowledge in determining the likely success of SBL in advancing students' notions of professional identity.

Introduction

As UK and Australian governments promote 'widening participation' in higher education an increasing number of students compete for places on professionally-orientated university courses. A subsequent reduction in work-based learning where students, as would-be professionals might normally articulate lived experience has resulted in a re-evaluation of what is possible in providing real world opportunities for aspiring professionals. Added to these pressures is the growing insistence that tertiary institutions help students to bridge perceived gaps between subject/disciplinary theory and professional practice.

While the number of potential graduates increase and sites for traditional work experience (e.g. hospitals, schools, law courts) remain constant, the search is on to find alternative ways of providing 'real-world' professionally-oriented opportunities to compensate for any shortfall in live work experiences. Scenario-based learning (SBL) predicated on situated learning theory (Lave & Wenger 1991; McLellan 1995) and the valuing of contextual knowledge, may provide one stratagem for getting students, as would-be professionals, nearer to the realities of their chosen profession via the construction and deconstruction of scenarios accompanied by strategic reflection.

Within practical SBL processes, students may be afforded opportunities to engage with realistic sets of circumstances, true-to-life tasks, real-world learning, authentic challenges and work-oriented roles - all mediated through the language and communication styles found in professional settings.

This chapter addresses the potential contribution of scenario-based learning in the construction of students' professional identity through a number of fundamental questions:

- What is scenario-based learning and how might it contribute towards the formation of students' professional identities?
- How might specific SBL approaches contribute to particular facets of professionalism?

Given the above, this chapter is in two parts: The first part locates attributes of scenario-based learning that lend themselves to the (de)construction of students' professional identity. The second discusses specific scenario approaches that may be employed singularly, or in combination, to engage students in a conscious development of professionalism

What is scenario based learning and how might it contribute towards the formation of students' professional identities?

'Scenario-based learning' (SBL) refers to any educational approach that involves the intentional use, or dependence upon scenarios to bring about desired learning intentions. Scenarios may comprise a given set of circumstances, a description of human behaviour, an outline of events, a partial story of human endeavour, an incident within a professional setting, or a human dilemma, (Errington 2003). In the literature 'scenarios' are variously labelled 'critical incidents' (Tripp 1993); 'scripted role-play', (Brislin & Yoshida, 1994); 'triggers' (Wilkie 2000); or by the catch-all term 'simulation' (attributed to numerous authors). There is a shared view among proponents that scenarios can potentially situate and contextualise all learning and teaching activities, (Naidu 2010).

It is significant that the word 'scenario' originates from the Latin word 'escena', or 'dramatic scene'. As such scenarios have the potential to appeal to students' 'dramatic imagination', (Courtney 1980) by embracing credible, multiple roles similar to those found in real world professional settings. Scenarios are likely to possess elements of story-line, journey, plot, conflict and climax. Some may facilitate an improvised (rather than set) 'script' and thus allow for vital moments of creative play and experimentation (Jackson 2009). These dramatic attributes can engage students' thoughts and feelings in the personal and social pursuit of professionally-oriented enquiry. Central to the dramatic nature of scenarios is a natural focus on praxis, relating experience with reflection in an explicit manner so that thought and action may go hand in hand.

Miller (1980) and Parkin (1998) note that scenarios also contain similar ingredients to good stories. However, unlike most stories, scenarios are usually offered 'incomplete' - usefully described by Stewart (2003:83) as "essential slices of reality", and thus capable of being deconstructed and examined 'slice-by-slice'. Their incompleteness can be cognitively motivating for students grappling with ill-defined problems, (Herrington & Oliver 1995), and troublesome for others made ill at ease when they encounter (realistic) 'uncertainty' and 'ambiguity', (Miller et al 2003).

In scenario-based learning processes students, as aspiring professionals, are presented with a scenario descriptor (set of circumstances) and one or more focus questions that indicate lines of inquiry. Students are prompted to assume specific work-based identities (current views) and/or envision 'new' ones (aspiring identities). Through the crafting of a contextualised scenario (delivered whole, or incrementally) and a judicious choice of focus questions, students have an opportunity to demonstrate acquired skills, pursue relevant problems, deliberate on matters of professional knowledge and explore genuine issues. Opportunities can be afforded "without experiencing the consequences of failure the real-world can impose", (Aitken, 2010:75), and where "situations that do not result in a good outcome provide important lessons for learning and future action", (Jackson, 2009:16).

Students explore professional worlds within the safety of the scenario aiming "to deal with the repercussions of the precipitating and related events efficiently and effectively", (Naidu, 2010:5). How students negotiate the challenges presented by the scenario, and reflect on actions/ decisions made, will invariably contribute to identity formation. The journey towards task completion will ideally engage students in processes of problem-solving/setting, decision-making, acts of creativity, critical analysis, evaluation, and reflectivity - factors compatible with employability skills valued by employers, (Universities UK 2009). Following an exploration of the scenario, (likely incorporating research), students report their findings to peers and tutor. The report may take the form of a presentation, a quasi written/verbal report, an executive summary, or other means of authentic communication typical of the chosen profession.

How might SBL assist in the formation of students' professional identity?

The literature indicates that scenario-based learning has the potential for enabling students to:

(i) Bridge disciplinary content with professional practice

In order to initiate a process of developing a professional identity, aspiring professionals need to connect subject theory with professional, work-based practice. 'Theory' will incorporate key themes, specific issues, competencies, and professional concepts specific to the professional context. Experience has shown that scenarios might best explore/investigate, rather than simply replicate, the repositories of knowledge underpinning the discipline. Scenario learning will likely fail if the amount of subject matter, albeit 'useful', overwhelms the scenario and subsequently the student, with too much detail.

(ii) Observe role models to identify potential identities (Ibarra 1999)

Scenario-based learning processes can expose students to a range of role models within a profession - either as simulated/virtual entities or as real visitors (employers possibly) invited to engage with students. 'The Dragons Den' television programme provides one example of potential employer interaction with potential employees.

Identities are formed within the context of professional communities rather than the context of individual roles: Brown et al (1989), cited in Herrington and Oliver (2006) note, "a critical aspect of the situated learning model is the notion of the apprentice observing the community of practice" (p.2). Scenarios can provide opportunities to observe roles in the context of the learning community. Observations may be made at a distance or students may try role models on for size via role-play, gaming and/or debate. Within scenarios, students can experiment to find out who they are and who they are not in building identities for capability.

(iii) Experiment with provisional selves (Ibarra 1999)

According to Zembylas (2003), cited in Cattley (2007:113), 'identity' is "the self never completed". SBL can provide strategic opportunities for students to experiment with provisional selves (Ibarra 1999). Students may engage with multiple roles, experience a variety of simple/complex scenarios, and negotiate any number of

specific challenges. Scenario engagement may reveal not only who they are *now* (e.g. potential lawyers or nurses) but also the kinds of lawyer or nurse they aspire *to be*. A well planned scenario journey through the curriculum can help bridge current realities with potential selves. The process may be scaffolded with timely opportunities for evaluation and critical reflection.

There exist scenario strategies (see the next section) that can engage students in processes of play (experimentation, creation, adaptation) in relation to roles, responsibilities and contexts. Scenario-based learning with its defining roots in human drama can potentially make “the agency of the player central to the learning process” (Jackson, 2009:9).

(iv) Evaluate experiments against internal standards and external feedback (Ibarra 1999)

Within SBL, students can give/receive immediate feedback reflecting current understanding of professional selves. Miller and Nambiar-Greenwood (2010:111) employ scenarios to unravel students’ ‘live’ clinical problems and ‘life’ issues experienced at particular points of their professional journey.

Scenario participants are (ideally) given opportunities to stand outside their simulated experiences to evaluate their professional progress and potential for conscious, critical action that may challenge the status quo of the profession, and taken-for-granted views of their own/other’s professionalism. As Brecht observes, “when something seems the most obvious thing in the world, it means that any attempt to understand the world has been given up”, (Willett 1964:71, quoted in Errington 1992:43).

(v) Introduce students to the culture of the profession

Lave and Wenger (1991) emphasise that “being able to speak the vocabulary and tell the stories of a culture of practice is fundamental to learning”, (quoted in Herrington and Oliver, 1995:6). Used judiciously by educators who possess ‘professional currency’, scenarios may provide students with snapshots of the culture which can be re/constructed at will. These are the “essential slices of reality” (Stewart, 2003:87) mentioned earlier.

The ‘professional culture’ is likely to incorporate forms of technical and informal language, etiquette, ethical positioning, roles and responsibilities, challenges, tasks, problems, relationships, key responsibilities, norms and values located within the profession, (Errington 2009:585). Members of the culture constitute ‘communities of practice’ (Kindley: 2002:3) to which students, as novice professionals, can gain insight into membership. Not as individual role identities, but as social actors within the professional community.

(vi) Engage students in authentic activities that reflect those undertaken in the profession

Authentic activities are real-world tasks that graduates can expect to encounter in professional/social contexts. Such tasks, if representative of the profession, can be motivating as students recognise the value of exploring scenarios which replicate real world contexts (Woo et al 2007) linked explicitly to authentic forms of assessment/feedback on progress (Errington 2008).

Jackson (2010:1) observes that in order “to prepare students for the complexities of the world we need to pay much more attention to the development of students’ capability for dealing with real world situations”. Such ‘capability’ is likely to be optimised when founded on a conscious, confident view of professional identity gained through successfully pursuing genuine problems in a realistic way, that is, problems based on realistic, relevant issues without predetermined outcomes. ‘Authenticity’ is sustained by educators maintaining close partnerships with employers and professional bodies, and by valuing students’ insights encountered on work placements.

(vii) Have the potential to support a range of lived experience in the development of professional identity

Jackson (2010) adds that if learning is to be at a deep level, authentic, and meaningful, then students will need to incorporate a broad range of rich, lived experiences that contribute towards a *life-wide curriculum*. Scenario-based learning holds the potential for students to apply and enrich a range of lived experiences within a scenario. Arguably, it would be impossible for students to exclude the influence of their beliefs, dispositions, qualities and abilities on decisions made and actions taken within SBL. But much more than this, a judicious choice of scenario experiences can move students forward in their thinking about the on-going, conscious (re)construction of professional identity. Scenarios can, and should add to the lived experience of students. Notions of ‘authenticity’ will undoubtedly be influenced by the closeness of the scenario to students’ own realities.

(viii) Develop empathy through affective aspects of scenario engagement

Students require opportunities not only to incorporate lived experiences, but also to integrate affective as well as cognitive aspects of identity formation. Pernice (2003) demonstrates how scenarios can be used to help students explore the emotional dimensions found in human settings. She gives instances of students working in the context of mental health and uses a combination of scenarios and writing-in-role to bridge personal and professional feelings engendered in given situations.

(ix) Provide multiple roles and perspectives

Through scenario engagement students have an opportunity to explore a range of perspectives on any one/multiple issues (Herrington & Oliver 2006). The more roles that students assume the more flexible they are likely to become in perceiving their own role identities.

Each role identity (personal and professional) carries with it certain vested interests. Students need to ascertain what these vested interests are and how they may induce role holders to act in particular ways. A deliberate exploration of role perspectives can reveal hitherto unconsidered interests/invisible voices/interests - to render a more deep level approach to identity formation. Understanding the motives/interests of relevant clients, patients and other associates is an important factor in the growth of professional identity.

(x) Develop teamwork in the context of professional settings

In a recent survey of employers in the UK, teamwork was regarded highly as a fundamental employability skill (Universities UK 2009). For teams to work successfully, it is deemed important that educators and students maintain an atmosphere conducive to learning; one in which students do not feel threatened or exposed, and feel able to proffer alternative opinions and solutions, and one where common outcomes (not necessarily a consensus) are valued. The role of the educator in helping form, support and sustain professionally oriented teams is crucial as is having team members value the team concept. Teamwork may be experienced by students in SBL when they interact collectively within simulated meetings, pursue common goals, and engage in collaborative tasks.

(xi) Develop students' cultural awareness through transformed practice

Ireland (2010) asserts that one of the main challenges of educating students for the professions is to create a learning environment which fosters learner transformation: One where 'situated practice' becomes 'transformed practice' in transforming the cultural awareness of potential graduates. Hill et al (2010:27) note that cultural awareness and client sensitivity are two skills often ignored in university teaching, and "such skills are often critical to the development of the self-awareness new graduates need as they enter the workplace".

How might specific SBL approaches contribute to particular facets of professional identity?

The number, variety and forms of scenario available to educators will likely influence the quality of formation of professional identity. Some educators seem unaware of the range of possibilities while clinging to the myths of 'good practice'. SBL can provide focused learning contexts in which aspiring professionals are introduced to the culture, language, mores, values, roles, and ethics of the intended profession. Four common scenario options discussed here are skills-based, problem-based, issues-based and speculative-based approaches (Errington 2003). These can be delivered separately or in combination to achieve specific needs. One main challenge for educators is to choose the option(s) that relate explicitly to particular aspects of identity formation.

The practical scenario examples that follow focus on one graduate cohort – intending medical practitioners in order to reveal the potential contribution made each scenario approach to identity formation, and notions of 'professionalism'.

(a) Skills-based scenarios

The most basic scenarios are skills-based: These provide simple structures to allow students to demonstrate what they have learned or understand *already* about 'facts, principles and procedures'. For example, trainee nurses demonstrate their clinical skills within simulated hospital settings for assessment (feedback) purposes, (Gammer 2003).

Skills-based scenarios appear most useful when knowledge appears 'fixed', possesses staged steps, or procedures; where abilities lend themselves to practical expression; notions of 'appropriate professional behaviour' are firmly defined; and, role expectations and responsibilities are made explicit.

In the example that follows, would-be physicians are required to demonstrate their knowledge of interpersonal skills between patient and physician in preparation for applying theory to practice in their {future}-medical setting.

Scenario descriptor

You are about to meet a patient for the first time. S/he is in the third bed in Ward Two. Be prepared to enter the Ward.

Focus questions

How will you approach your patient?

What will you say to him/her first? Next? Why?

A skills-based scenario: An introduction to bedside manner in hospital/clinical settings

The medical students view a video of a simulated clinical interview between a doctor and her patient. A narrator on the video highlights the ways in which medical practitioners should communicate with their patients, and then shows the interview at different stages to make clear his points. The clinical setting could be anywhere with a white doctor and a white, very articulate patient. The medical educator uses the video to demonstrate desirable learning - questioning techniques - use of appropriate behaviour - listening skills, and other interpersonal aspects.

Next, the students role-play the observed skills where one person becomes the doctor, the other is the patient, and the other is an observer whose task is to offer immediate feedback. The medical educator explains the parameters and the role-plays take place at one and the same time. After ten minutes members exchange roles and the experience is repeated until group members have experienced every role. The experience is followed by an analysis of the experiences, critical reflection and evaluation. Note that the emphasis is on notions of interpersonal competence, success and failure, and any deficit between intentions and achievements. Experience suggests that these simple role played scenarios are usually one-off experiences – lacking opportunity to improve the skills; the next stop will be the reality itself.

Some pros of skills-based scenarios:-

- Students have an opportunity to put into practice what they have learned
- There is immediate feedback/realization if one or more steps are omitted from a demonstration of a process, ability and/or skill
- Knowledge appears 'fixed' with clearly defined steps or procedures
- Abilities lend themselves to practical expression
- Notions of 'appropriate professional behaviour' are clearly defined
- Role expectations and responsibilities are made clear
- Scenarios are defined clearly with set tasks

Some cons of skills-based scenarios:-

- By definition there is little, if any room for students to exercise their initiative unless more opportunities for decision-making are present
- Some educators are of the opinion that skills-based scenarios are/should be the only options used to develop professionals (through modelling)
- Some students may come away from skills-based experience believing the models presented are the only approaches to be taken
- Skills-based scenarios are rarely explored within their personal, social and cultural contexts. How, for example, do we prepare our medical practitioners for dealing with non-English speaking patients? Patients with low levels of (communicational) literacy? Reluctant patients?

(b) Problem-based scenarios

Incorporating skills, but with the addition of more demanding elements, problem-based scenarios offer challenges and put students' understanding of professional identity to the test. In problem-based approaches, students pursue specific open-ended problems where they are required to identify what they know already about the problem; draw upon working knowledge; locate that knowledge in their discipline area; construct knowledge en-route; and, apply these gleanings to a series of challenges; react appropriately to problems as they arise; and, arrive at considered solutions based on reasons that can be justified. The process also incorporates aspects of deep level learning, decision-making skills, critical analyses, gathering and justification of appropriate evidence, and consideration of alternative solutions.

"We have to prepare students not just for the complexity they face here and now but lay the foundations for how they will deal with unknowable change and complexities they will have to grapple with thirty years from now", (Jackson, 2009:3).

In a problem-based scenario process, students are not encouraged to focus on singular 'correct' answers (as these will change over time), but rather on the decision-making process itself. The journey is more important than the destination. Even simple decisions will have consequences, and often students report that so-called 'simple' choices often turn out to be more complex than originally anticipated. Problem-focussed scenario examples can help potential graduates encounter and tolerate ambiguity, value uncertainty, and be more spontaneous in the light of changing circumstances (Errington, 2005; 2009).

Here is a problem-based scenario example chosen because of its nearness to the real world with attendant 'messiness' and ambiguity. It was presented to a group of aspiring health professionals:

Scenario descriptor

A male patient has been admitted to Ward 9 during the night. He speaks little if any English, refuses to be physically examined, and seems to be complaining about his throat. His tongue is covered in black fur and he has vomited twice.

Focus questions

What are the underlying problems here? Why?

In this example, there is no clear singular problem inviting one simple solution. Establishing the nature of the problem(s) or issue, is a first priority: Is this scenario a predominantly cultural issue? Is it a simple matter of diagnosing the symptoms? These questions and others will drive the pursuit of the problem, and ultimately students will arrive at one or numerous solutions. On the a problem-based scenario learning journey, students will be required to generate tentative hypotheses about the problem(s) along with ways to help the patient through exercising their emerging role.

Students first determine what they know already about the patient/problems drawing on tacit knowledge, course materials, similar medical cases, generic resources, growing knowledge of diagnosis, and direct educator input (lectures, tutorials, clinical experience). Then they brainstorm ideas to locate what they do not know but need to know about the patient and relevant diagnostic applications. The students divide into groups of three where one person role-plays the "doctor", the other is the patient, and the final group member is an observer whose task is to feedback following the role-play. After an initial discussion to determine parameters, the role-plays take place at one and the same time. Ten or so minutes later, students exchange roles, and this sequence is repeated until everyone has experienced each role. The role-plays and observer feedback is followed by systematic presentations (individual to group) of findings/observations - problems - likely solutions. Stress is placed on the processes adopted to reach meaningful conclusions about the patient's welfare, and actions to be taken in the light of this gleaned knowledge. Processes include a deconstruction of notions about culture and corresponding professional responses. Finally, there is an analysis of their performance: Not simply in the behavioural sense, but rather in the ability to deal with uncertainty and ambiguity of the situation in which they found themselves.

How they dealt with this 'messy' situation will indicate to the educator and (importantly) themselves what they learned.

The above example is more than an exercise in problem solving (though patients are likely to be relieved they can do so). Rather, the focus is on the siting of the diagnostic process within personal, social and cultural contexts incorporating : decision-making, applying diagnostic processes, taking appropriate action, that which is most likely to optimise (but never guarantee) a successful outcome. One significant task of the educator is to help students identify and locate what knowledge needs to be acquired to move them toward a more proficient level of professionalism – not simply in terms of content, but rather in respect to knowledge-seeking methods .

Some pros of problem-based scenarios:-

- The realisation that (specific) problems have to be identified before 'solutions' can be found
- A growing awareness of uncertainty and the need for physicians to tolerate ambiguity particularly in relation to working within a community
- Simple problems may turn out to be more complex than hitherto anticipated when one is exposed to few presentation of symptoms/'causes'
- There is rarely one simple solution to real world problems
- Problem-based scenarios incorporate a range of knowledge ranging from simple skills to more complex, intuitive understanding of (not easily identifiable) problems

Some cons of problem-based scenarios:-

- Without sufficient scaffolding of problems and clear pathways/access to resources students can have their confidence undermined
- Some students have difficulty dealing with uncertainty and ambiguity (See Miller et al 2003) in their pursuit of the 'right answer'. This serves to emphasise the importance of de-briefing and reflection during and after the scenario experience.
- Some educators regret the amount of time taken for students to experience the process and may be tempted to rush in with the "correct" answers, or at best turn the exercise into a game of multi-choice response

Problem-based scenarios appear in a variety of graduate preparation contexts, including helping students respond to global disasters as trainee disaster educators, (Aitken 2010); meeting the creative design demands of industry clients (Fleischmann and Daniel 2010); engaging in a bridging strategy between 'top-down' theorising in pre-service teacher education and the 'bottom-up realities of school-based teaching (Adam 2010).

(c) Issues-based scenarios

Incorporating skills and problems, issues-based scenarios often require students to observe relevant concerns from different role perspectives. Students explore concerns central to, or surrounding professional practice. For example, law students debate concerns surrounding 'euthanasia' in an attempt to learn more about human motivations, agencies, and the interests which influence this and other authentic, real-world issues.

Issues-based scenarios provide opportunities for potential graduates to take a stand on issues/concerns that inform professional practice and to assume other perspectives via role-reversal. Much can be gained by spending time in 'other people's shoes', that is, developing empathy on the basis of having experienced the issue from another's perspective, (Errington 1997). It is important that medical graduates and other aspiring professionals are able to articulate genuine issues with conviction and underpin positions with valid evidence. It is reasonable to suggest that effective professionals need to extend their abilities beyond simple persuasion to reach reasoned debate.

In the example that follows, would-be physicians are invited to explore and identify human interests surrounding the issue of 'euthanasia' aimed at showing that an apparent 'simple' issue is indeed more complicated on subsequent viewing.

An issue-based scenario: 'Euthanasia'

Scenario descriptor

You are a member of the jury where the accused is charged with murdering her mother who was experiencing severe pain as a victim of cancer. In her defence, the accused said that she was asked by her mother to end her life painlessly. The accused administered an overdose of morphine to her mother.

Focus questions

What are the issues here?

What is your position? Why?

Student groups assume one or more perspectives: as family members, lawyers, various factions of the medical community, pro-euthanasia lobbyists, pro-life lobbyists, and any 'others' representing unheard voices. The issue is explored from a range of vantage points using real world examples. What follows is a debate where the quasi-courtroom becomes the site for the testing of arguments, articulation and defending of positions, and, where appropriate opportunities for role-reversal. Here students have an opportunity to assume positions contrary to their own.

Why this choice of scenario? Medical students investigating this kind of issue may (hopefully) come to realize (along with counterparts in law) that 'euthanasia' and similar issues involve real family members, people with feelings, who care for their loved ones. The issue may transcend 'simple' ethical positioning, or principle of law to be relevant in the life of aspiring medical physicians whose task will be to save lives while also relieving pain. It is important that students hold rather than abdicate their position by virtue of reasoned debate and a genuine expression of feelings (passion?) afforded through scenario-based learning.

Arguably, an important part of developing a professional identity and notions of 'professionalism' lies in knowing one's own beliefs, holding informed opinions and taking up ethical positions while being empathetic towards the perspectives of 'others' even when we do not agree with their positions.

Some pros of issues-based scenarios:-

- A growing ability to recognise multiple perspectives on any 'singular' issue and professionals need to be aware of these
- Opportunities to practice and develop decision-making skills in a professional (beyond a personal) capacity
- Realisation that the growth of professionalism involves an ability to evaluate human positioning and act accordingly
- The ability to be open to others while still able to make a decision based on the evidence
- A growing awareness of the importance of one's own stand/beliefs, attitudes and values and their influence on personal, social and professional decision-making.

Some cons of issues-based scenarios:-

- Given time constraints, some educators may be tempted to limit the number of perspectives to be "explored" to a simple few which allow the floodgates on stereotypes to be opened
- The issue must be relevant and genuine, that is, without predetermined 'conclusions' if authentic learning is to take place. Medical educators may be tempted to opt for 'tried and tested' issues which *were* relevant once, but no longer are. It is important that educators know what the current issues are, and have a good sense of where those issues might be going, in terms of stands taken, and their potential resolution.
- The role bearers/perspectives represented in the areas of concern may be treated as stereotypes without sufficient research of the human agents genuinely engaged in the "real-world" issue(s). This can be time consuming.
- Realisation that the growth of professionalism involves an ability to evaluate human positioning and act accordingly

- The ability to be open to others while still able to make a decision based on the evidence
- A growing awareness of the importance of one's own stand/beliefs, attitudes and values and their influence on personal, social and professional decision-making.

(d) Speculative-based scenarios

Speculative-based scenarios often subsume skills, problems and issues. They are usually designed to allow students to contemplate a range of past, present, and future factors that influence present-day trends, perceptions and issues. For example, trainee forensic scientists investigate the causes of a victim's death; business students look to current trends to determine the likely viability of a company. Van der Heijden (2002:142) states that the more speculative scenarios "enhance perception by providing a framework to understand events as they occur; make people think; (and provide) a structure for dealing with complexity".

Speculative-based scenarios necessarily engage students in formulating hypotheses, gathering evidence to support/refute their ideas, and presenting these to the tutor and peers for evaluation. '(Guess-) estimations' are made about what might have happened in the past (e.g. archaeological site), or what might happen in the future (e.g. population boom), based on evidence found in the 'here-and-now'.

Speculative-based scenarios can create a space for students to understand better the inevitability of change and the role of professionals within context. Here lie promising opportunities for students to think ahead, make predictions based on what they know now, what can be researched, and what can be reasonably assumed. Consequences can be realised, hypotheses tested and the implications of current decisions can be pursued into virtual futures, or alternative pasts/histories. Students realise that what is said and done now has implications for everyone. The past and future can be viewed as experimental, 'problematic' with few fixed points. 'What would happen if?' 'Why did this happen in this way?' These are two perennial questions asked as students interrogate their subject area/chosen profession.

A Speculative-based scenario: 'Almost Immortal'

Scenario descriptor

Welcome to the Year 2061. Thanks to advances in medicine and technology it is now possible to live almost forever. Unless you are killed accidentally, commit suicide/euthanasia, or die in some natural disaster, you are virtually immortal.

Focus questions

*What do you see as the main consequences for the following factors in almost living forever:-
Social? Cultural? Technological? Educational? Spiritual? Personal? Political? Environmental? Other?*

Adapted from Murray (2010:261)

Medical students are divided into groups of 4-6 and invited to choose two factors to explore. They then discuss the impact of personal immortality (something which the medical profession have helped to achieve) on their chosen factors. They are invited to brainstorm, identify, hypothesise, and interrogate their perceptions - drawing on contemporary and/or evidence from the past to substantiate their views.

Why this kind of scenario with medical students? This exercise has revealed the following value stressed by students in their feedback:

- The realisation that much human knowledge is connected (e.g. perceptions of environmental factors in 2061 are linked to all other factors (population growth, etc) in 2061
- Evidence for what we predict is with us now: Population growth (with living forever) is familiar to us in 2011, e.g. mass education (India); recent birth control (China)

- Deliberations on the future are determined by our lived experiences, constituting beliefs, values, ethics; we are unlikely to transcend our current beliefs and dispositions when speculating on the trajectory of future factors
- Future settings allow for contemplation on the direction of student's own identity formation (where do students want to be ten years from now?).
- There is an opportunity to appreciate the quality of life, as lived now (Murray 2010:)

Herein lie creative opportunities to bring together students from a range of disciplines (See Murray 2010) to help one another realise the value of multi-disciplinary teamwork, to see problems/tasks viewed from various angles, and to illuminate the potential for sustained professional cooperation as part of a holistic learning community.

Pros of speculative-based scenarios:-

- These kind of scenarios often provide distance (sited in the past or future) between the student(s) and the problem/task at hand so that they are likely to worry less about being 'wrong' in their conclusions; i.e. there are no consequences for failure
- Students are less likely to fail anyway as, for example, 'life in the Year 2061' has yet to happen and evidence to support deliberations is tentative at best
- Students are encouraged to be creative, to think outside the square thanks to the dramatic qualities of scenarios, i.e. time (any year/hour, part or future) and space (any place, site or position)
- Students have potential opportunities to engage lived experience and bring this to bear on deliberations
- Scenarios invite students to transcend traditional disciplinary boundaries in order to pursue relevant tasks.

Cons of speculative-based scenarios:-

- If the distance is too great between present realities and points in the past/future students are likely to dismiss the propositions promoted by the scenario
- Speculative scenarios often demand a range of resources spanning time/space, alongside a mature grasp of the likely influence of these factors on the changing professional workplace

These four scenario approaches to scenario-based learning may be employed singularly, or in combination to contribute towards specific aspects of professional identity and notions of professionalism. Curriculum planners might (re)view the entire undergraduate curriculum to determine the strategic points where scenario-based learning might be embedded to enable students become aware of (professional) progress, critically reflect on experience, and link known with anticipated knowledge. This is not to say that students will be at one and the same stage in their professional development. Knowing where scenario interventions need to be placed along the curriculum to optimise professional experience certainly poses challenges for educators considering SBL as a contributor to the formation of professional identity.

Discussion

The first part of the chapter was used to define and identify some attributes of scenario-based learning that could be engaged to advance students' notions of professional identity and the epistemology necessary for being an effective professional via a judicious use of scenarios in response to the questions: What is scenario-based learning and how might it contribute towards the formation of professionalism? The dramatic qualities of scenarios, their incompleteness, the opportunities afforded to explore skills, problems, issues and deliberations in context, and their potential in providing students with authentic, cultural and realistic experiences can work well to supplement rather than replace lived work experience.

Looking beyond identity formation to more proactive elements of 'professionalism', Eraut (2010:6) offers four basic aspects of performance that constitute professional practice. These encompass notions of 'identity formation' and 'professionalism'. These aspects are set out below. An indication is made [in italics] why/how each particular aspect might be met through the use of scenario-based learning:

(a) "Assessing clients and situations":

By necessity, students engaged in SBL are engaging in processes to continually assess situations and their own/other's role in observing possible courses of action. Situations are determined on a number of bases -

cognitive, affective and behavioural. Problem-based and speculative-based scenarios particularly with opportunities for timely reflection, invite students to observe and sum up what has happened, what is happening, the possibilities of what might happen, and why.

- (b) "Deciding what, if any, action to take"

From on-going observations, interactions and interventions, students must decide what actions if any are appropriate from what they are witnessing. Students whether engaged in minds-on or hands-on activities, or both, are faced with sets of circumstances that often demand varying degrees of direct action/inaction. Scenarios focus on: 'What would a professional do in this situation? Why?

- (c) "Pursuing an agreed course of action, individually or collectively; and modifying, consulting and reassessing as and when necessary"

One might argue that the course of action, to be lived as real', must invariably take place within the actual professional setting. The counter-argument is that simulation can get as close as is safe to particular situations. Whether students behave in scenarios the same way they would in real life settings is a matter for conjecture. One colleague at a New Zealand university gave his business students a scenario of a failing company at the beginning of the semester. Each week the students were invited to state what course of action they would adopt in the light of changing (realistic) circumstances which he provided. By the end of the semester the company's fortunes had been reversed. He assured his students that the given circumstances, and his interventions were indeed real - based on the fate of a real company in Auckland.

- (d) "Meta-cognitive monitoring of the people involved".

A cyclic process of planning, action, reflection and evaluation followed by further planning afford rich, staged opportunities for meta-cognition. Students engage in simulated exercises similar to those found in the workplace. Though this can never be the same as being there, it is as close as it can get.

Practical endeavours are likely to prove more successful when specific kinds of scenarios are aligned with what are considered to be desirable outcomes for students who are learning to be professional graduate attributes (importantly) explored in the professional context, such as teamwork; interpersonal skills; an appreciation and capacity to work in culturally diverse environments; critical and reflective abilities; problem-solving and problem-seeking skills; analytical skills; subject-specific skills; information literacy skills (SBL is popular in online learning environments); and, the capacity to apply knowledge and skills, (Errington et al, 2011).

The second part of the chapter focussed on specific scenario options that might be employed to achieve particular facets of professionalism. Four common kinds of scenarios were advanced: Skills-based scenarios are used to enable students to demonstrate acquired knowledge, abilities and skills. Problem-based scenarios are used to explore more demanding professionally-oriented circumstances uncertainty driven by problems associated with challenging, realistic circumstances, including uncertainty and ambiguity. Issues-based scenarios invite students to investigate relevant issues, assume roles to discover vested interests, and to debate and justify positions on issues supported by evidence. Speculative scenarios invite students to hone acquired skills, pursue/ identify problems, understand issues/positioning, and deliberate on possible futures and factual/ alternative histories.

How successful educators are in employing scenario-based learning approaches will invariably rest on their knowing *why* SBL is used (the rationale), knowing *how* to deploy it (deciding SBL is appropriate), knowing *which* options will facilitate desired processes/outcomes, knowing *when* and *where* SBL needs to be delivered within the curriculum (timeliness and placement), and knowing *that* it can make a difference to the lives of students in pursuit of professional meaning and identity. These are not matters to be taken-for-granted.

In the hands of skilful educators, scenario-based learning can get students as close as is possible to the 'realities' of the (changing) workplace/profession. However, scenarios may not be able to capture the kind of detachment noted by Eraut (2011) where 'new' workers often find they are the only novices in the workplace at any one time. However, unlike many workplaces, professional contexts usually have strict systems of learning progression in place denoted by the skills needed to proceed to the next professional level. The likely success in

transferring learning gains from university to professional setting will undoubtedly depend on the welcoming ambience of the professional context, potential colleagues, the size/nurturing of the organisation, social climate and the power/management/communication structure.

What SBL can do very well is to afford students opportunities to integrate their lived experiences with that gleaned specifically at university. Van der Heijden (2002) has successfully used scenarios in workplace/professional settings to move whole organisations forward (e.g. Royal Dutch Shell). At present, SBL efforts in university settings are much more modest, but nevertheless have the potential to help students bridge the gap between the theory and practice of their chosen profession and, by so doing, help sow and nurture the seeds of professionalism.

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Published 03/02/11